Antirepression as a second mechanism of transcriptional activation by a minor groove binding protein

Smits, Wiep Klaas; Hoa, Tran Thu; Hamoen, Leendert W.; Kuipers, Oscar P.; Dubnau, David

Published in:
Molecular Microbiology

DOI:
10.1111/j.1365-2958.2007.05662.x

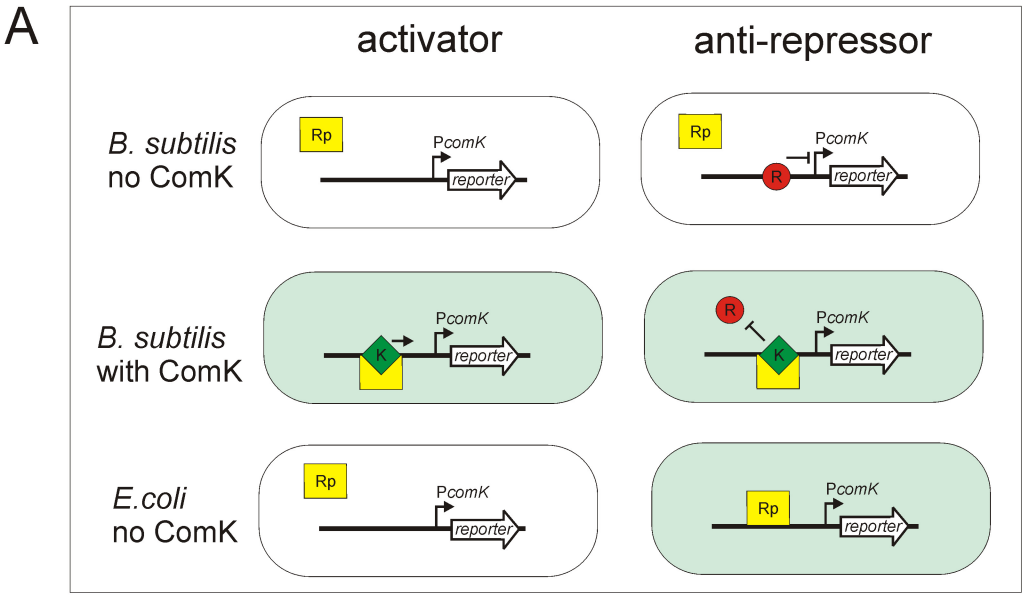
Anti-repression as a second mechanism of transcriptional activation by a minor groove binding protein

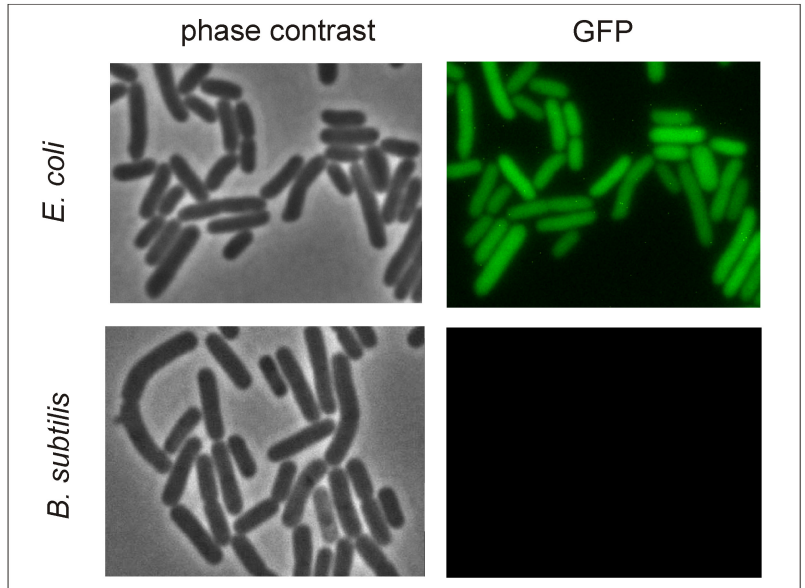
Wiep Klaas Smits, Tran Thu Hoa, Leendert W. Hamoen, Oscar P. Kuipers, David Dubnau

Supplemental Figure 1. Heterologous expression and anti-repression. (A) Schematic depiction of the behavior of P*comK* when ComK acts as an anti-repressor or an activator. RNA polymerase is depicted as a square (Rp), ComK as a diamond (K). Expression in a heterologous host, *E. coli*, is given in the absence of functional ComK protein. (B) Expression from P*comK* in the absence of ComK in *B. subtilis* (KGFPΔK) and *E. coli* (ED232) (Haijema et al., 2001). Cells harboring a *comK-gfp* reporter construct were grown, harvested and visualized according to Materials and methods.

Supplemental Figure 2. Fluorescence from a P*rok-gfp* reporter fusion. Fluorescence from single cells was quantified as described in Materials and Methods. Error bars show the standard deviation. The number of cells (n) on which the calculated mean and standard deviations are based is shown below each bar. Time is indicated in hours relative to the transition between exponential and stationary growth phase (T_0).

Smits *et al.* Supplemental Figure 1





Smits *et al.* Supplemental Figure 2